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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GARCIA, ERNESTO

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

03/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,905	Applicant(s) BOURGES, BERNARD	
	Examiner ERNESTO GARCIA	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/5/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 12, 2008 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on December 5, 2007 has been now been considered. In reviewing the record, the examiner noticed that the IDS filed on December 5, 2007 was previously considered but not mailed with the last Office action. The examiner has acknowledged the IDS dated December 5, 2007 and provided as an attachment.

Drawings

The drawings were received on December 12, 2008. These drawings are not accepted since the sheets on which Figures 3 and 4 are placed on do not comply with 37 CFR 1.121. In particular, these new sheets must be designated as "New sheet" rather than "Replacement Sheet". Accordingly, the previous drawings objections still remain.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claims 14-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 14, the metes and bounds of the claim is unclear. In particular, the claim sets to define a "connection system" yet there is no interaction between both the shafts and the cylindrical coupling to render being a connection system. Note that the recitation "for connecting the ends" in line 10 and "a cavity for receiving the axial end extensions of the shafts" in line 19 functionally recite the intended use of these parts which merely set forth a listing of parts of the connection system and thus unclear how a listing of parts make up a connection system. The recitation "the driving shaft and driven shaft are approximately coaxial" in line 25 is redundant since line 7 has set forth the same orientation.

Regarding claim 17, the recitation "a fourth axial height (H3)" in line 3 cannot be set when no third axial height has been previously set forth. Is one to assume there is a third axial height? The recitation "third diameter" in line 4 makes unclear whether there

Art Unit: 3679

is a first diameter and a second diameter to render there being a third diameter. Is one to assume a first diameter and a second diameter are present? The same problem arises with respect to the "fifth distance (H4)" in line 6. Is one to assume there are four distances prior to this fifth one?

Regarding claim 19, the recitation "a second maximum clearance (J2)" in line 3 and "a third maximum clearance (J4)" in lines 5-6 cannot be set forth when no first maximum clearance has been recited. Is one to assume that there is a first maximum clearance? The same problem arises in the recitation "the fifth axial height (H4)" in lines 4-5. Is one to assume there is a fourth axial height when none has been previously recited. Further, the recitation "the third axial height (H3) of the annular groove" in line 4 lack proper antecedent basis.

Regarding claim 22, "the projection" in line 2 lacks proper antecedent basis. Further, the recitation "the projection" in line 3 makes unclear whether that is the one from the driving shaft or that of the driven shaft.

Regarding claim 23, "a fourth diameter" in line 3 also cannot be set forth without first reciting three diameters. Is one to assume a first diameter, a second diameter, and a third diameter somewhere? Further, the recitation "the annular groove" in lines 4 and 8 makes unclear whether that is the groove of the driving shaft or that of the driven shaft.

Regarding claims 15-18, 20, 21, and 24-28, the claims depend from claim 14 and therefore are indefinite.

Claim Rejections - 35 USC § 102

Claims 14, 15, 20, 22, 23, 27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyle et al., 2002/0013085.

Regarding claim 14, Boyle et al. disclose, in Figure 1, a mechanical and electrical connection system comprising a driving shaft **A5**, a driven shaft **12**, and a generally cylindrical coupling **1**. The driving shaft **A5** is connected to an axial translation device **11**. The driving shaft **A5** has an end comprising an annular groove **A1** (see marked-up attachment) and an axial end extension **A2** proximate to the annular groove **A1** and having a first axial height. The driven shaft **12**, approximately coaxial with the driving shaft **A5**, has an end comprising an annular groove **A3** and an axial end extension **A4** proximate to the annular groove of the driven shaft **12**. The axial end extension **A4** of the driven shaft **A5** has a second axial height. The coupling includes a first annular shoulder **13b**, a second annular shoulder **13c**, and a cavity **13a**. The first annular shoulder **13b** has a surface having a shape complementary to the shape of the annular groove **A1** of the driving shaft **A5** without clearance. The second annular shoulder **13c** has a surface having a shape that fits into the annular groove **A3** of the driven shaft **12**.

Art Unit: 3679

A radial clearance **A5** is provided between the second annular shoulder and the annular groove **A3** of the driven shaft **12**. An axial height of the cavity **13a** is strictly greater than the sum of the first and second axial heights of the axial end extensions **A2**, **A4**. The axial end extension **A2** of the driving shaft **A5** and the axial end extension **A4** of the driven shaft **12** remain in mechanical and electrical contact due to an elastic conducting means **14**. The driving shaft and the driven shaft are able to move along an overall axial direction and are able to transmit approximately axial forces.

Regarding claim 15, the conducting means **14** is a metallic helical spring **14**.

Regarding claim 18, a first radial clearance is between an outer surface of the axial end extension **A4** of the driven shaft **A5** and a wall of the cavity **13a**.

Regarding claim 20, the axial end extension **A2** of the driving shaft **11** comprises a projection having an end with a wall (the flat wall that touches the spring). The axial end extension of the driven shaft **12** comprises a projection having an end with a wall (tapered in this case).

Regarding claim 22, the axial end extensions **A2**, **A4** have a base located respectively between the annular groove and the projection of the shafts.

Regarding claim 23, the axial end extension of the driving shaft **A5** has a cylindrical base having a diameter greater than the diameter of the annular groove **A1** of the driving shaft **A5**. A transverse wall of the annular groove **A1** of the driving shaft **A5** is formed. The axial end extension of the driven shaft **12** has a cylindrical base having a diameter greater than the diameter of the annular groove **A3** of the driven shaft **12**. A transverse wall of the annular groove **A3** of the driven shaft **A5** is formed. The first and second shoulder **A2**, **A4** define the cavity within the coupling.

Regarding claim 27, the end of the driven shaft contacts the end of the driving shaft (via the spring 14).

Regarding claim 28, the driving shaft **A5** is a rod of a pneumatic jack and the driven shaft **12** is an extension rod supporting a chisel **11a** (at the other end).

Claims 14, 15, 18, 20, 22, 23, 27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Everett, 4,289,367.

Regarding claim 14, Everett discloses, in Figure 1, a mechanical and electrical connection system comprising a driving shaft **30**, a driven shaft **18**, and a generally cylindrical coupling **16**. The driving shaft **30** is connected to an axial translation device **A1** (see marked-up attachment). The driving shaft **30** has an end comprising an annular groove **A2** and an axial end extension **A3** proximate to the annular groove **A1**

Art Unit: 3679

and having a first axial height. The driven shaft **18**, approximately coaxial with the driving shaft **30**, has an end comprising an annular groove **38** and an axial end extension **A4** proximate to the annular groove **38** of the driven shaft **18**. The axial end extension **A4** of the driven shaft **30** has a second axial height. The coupling includes a first annular shoulder **A5**, a second annular shoulder **36**, and a cavity **A6**. The first annular shoulder **A5** has a surface having a shape complementary to the shape of the annular groove **A2** of the driving shaft **30** without clearance. The second annular shoulder **36** has a surface having a shape that fits into the annular groove **38** of the driven shaft **18**. A radial clearance (see Figure 1) is provided between the second annular shoulder **36** and the annular groove **38** of the driven shaft **18**. An axial height of the cavity **A6** is strictly greater than the sum of the first and second axial heights of the axial end extensions **A3**, **A4**. The axial end extension **A3** of the driving shaft **30** and the axial end extension **A4** of the driven shaft **18** remain in mechanical and electrical contact due to an elastic conducting means **22**. The driving shaft **30** and the driven shaft **18** are able to move along an overall axial direction and are able to transmit approximately axial forces (see Figure 2).

Regarding claim 15, the conducting means **22** is a metallic helical spring **22**.

Regarding claim 18, a first radial clearance is between an outer surface of the axial end extension **A4** of the driven shaft **18** and a wall of the cavity **A6**.

Regarding claim 20, the axial end extension **A3** of the driving shaft **30** comprises a projection **A7** having an end with a wall (the flat wall that touches the spring). The axial end extension **A4** of the driven shaft **18** comprises a projection **A8** having an end with a wall (tapered in this case).

Regarding claim 22, the axial end extensions **A3**, **A4** have a base located respectively between the annular groove and the projection **A7**, **A8** of the shafts.

Regarding claim 23, the axial end extension **A3** of the driving shaft **30** has a cylindrical base having a diameter greater than the diameter of the annular groove **A2** of the driving shaft **30**. A transverse wall of the annular groove **A2** of the driving shaft **30** is formed. The axial end extension **A4** of the driven shaft **18** has a cylindrical base having a diameter greater than the diameter of the annular groove **38** of the driven shaft **18**. A transverse wall of the annular groove **38** of the driven shaft **18** is formed. The first and second shoulder **A5**, **38** define the cavity within the coupling.

Regarding claim 27, the end of the driven shaft contacts the end of the driving shaft (via the spring 22).

Regarding claim 28, the driving shaft **30** is a rod **30** of a pneumatic jack (note that there no pneumatic jack is claimed and this is just a label) and the driven shaft **18** is an extension rod **18** supporting a chisel **32** (at the other end).

Claim Rejections - 35 USC § 103

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al., 2002/0013085, in view of Basnett, 4,783,897.

Regarding claim 16, Boyle et al., as discussed, fails to disclose the annular groove **A1** of the driving shaft **12** includes two walls perpendicular to the axis of the driving shaft **12** and separated by a distance of about a third axial height, and a bottom comprising a cylindrical surface with a first diameter coaxial with the axis of the driving shaft **12**. Further, Boyle et al. fail to disclose the first annular shoulder also provided with two walls perpendicular to the axis of the coupling and the two walls separated by a distance of the third axial height (H_0)- e , where e is greater than or equal to 0.05 and less than or equal to 0.2mm, and a cylindrical wall having a second diameter $C + e'$, where e' is equal to or greater than 0.05 mm and less than or equal to 0.2 mm. Applicant is reminded that changing the shape of the annular groove and that of the shoulder is an obvious modification as taught in Basnett to retain the shafts to the coupling such that the groove and shoulder are square in cross-section rather being rounded as an alternative. With respect to e and e' having a specified range, applicant

Art Unit: 3679

should note that this is merely an engineering tolerance and one skilled in the art would have suggested to use a tolerance of $\pm .05\text{mm}$ depending on the amount of sliding contact or no contact at all.

Regarding claim 17, Boyle et al., as discussed, discloses the annular groove of the driven shaft 12 having a bottom comprising a cylindrical surface with a diameter coaxial with the axis of the driven shaft. However, Boyle et al. fail to disclose the k of the driven shaft including two walls perpendicular to the axis of the driven shaft and separated by a distance of about a fourth axial height, and the second annular shoulder including two walls perpendicular to the axis of the coupling and separated by a distance strictly less than the axial fourth height of the groove A3, and a cylindrical wall with a diameter strictly greater than the diameter of the annular groove A3 of the driven shaft **12**.

Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al., 2002/0013085.

Regarding claim 19, Boyle et al., as discussed, teaches a maximum clearance corresponding to the difference of the axial height of the cavity and the sum of the first and second axial height of the axial end extensions (this depends where the cavity is taken). However, Boyle et al. fail to disclose the difference between the axial height of the annular groove A3 of the driven shaft **12** and the axial height of the second shoulder

13c corresponds to a maximum clearance strictly greater than the maximum clearance between the ends of the shafts. Applicant is reminded that a change in size is generally recognized as being within the level of ordinary skill in the art. Therefore, it would have been an obvious matter of design choice to change the size of the second shoulder or decrease the size between the ends of the shaft, especially when the ends of the shaft move relative to each other and such modification would have involved a mere change in the size of the components. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claim 21, Boyle et al., as discussed, discloses the wall of the projection of the axial end extension of the drive shaft comprises curvature at its mid-point greater than a curvature of the wall of the projection of the driving shaft. Applicant is reminded that changing the conical surface of the wall into a spherical surface, which inherently has curvature, is an obvious modification since either shape allows ease of insertion into a cavity. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the wall of the projection of the axial end extension of the driven shaft comprise curvature at its mid-point greater than a curvature of the wall of the projection of the driven shaft as an alternative design for allowing insertion into the cavity of the coupling.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everett, 4,289,367, in view of Basnett, 4,783,897.

Art Unit: 3679

Regarding claim 16, Everett, as discussed, fails to disclose the annular groove **A2** of the driving shaft **30** includes two walls perpendicular to the axis of the driving shaft **30** and separated by a distance of about a third axial height, and a bottom comprising a cylindrical surface with a first diameter coaxial with the axis of the driving shaft **12**. Further, Everett further fails to disclose the first annular shoulder **A5** also provided with two walls perpendicular to the axis of the coupling and the two walls separated by a distance of the third axial height (H_0)- e , where e is greater than or equal to 0.05 and less than or equal to 0.2mm, and a cylindrical wall having a second diameter $C + e'$, where e' is equal to or greater than 0.05 mm and less than or equal to 0.2 mm. Applicant is reminded that changing the shape of the annular groove and that of the shoulder is an obvious modification, as taught in Basnett, to retain the shafts to the coupling such that the groove and shoulder are square in cross-section rather being rounded as an alternative. With respect to e and e' having a specified range, applicant should note that this is merely an engineering tolerance and one skilled in the art would have suggested to use a tolerance of $\pm .05$ mm depending on the amount of sliding contact or no contact at all.

Regarding claim 17, Everett as discussed, disclose the annular groove **38** of the driven shaft **18** having a bottom comprising a cylindrical surface with a diameter coaxial with the axis of the driven shaft 18 and separated by a distance of about an axial height and a bottom formed as a cylindrical surface with a diameter coaxial with an axis of the driven shaft 18. However, Everett fails to disclose, the second annular shoulder

Art Unit: 3679

having two walls perpendicular to the axis of the coupling and separated by a distance strictly less than the axial height of the distance of the separated walls of the annular groove of the driven shaft, and a cylindrical call with a diameter strictly greater than the diameter of the annular groove of the driven shaft. Applicant is reminded that these features are inherently found in a square shaped shoulder versus one that is triangular in shape. Accordingly, changing the shape of the shoulder from triangular to a square is an obvious modification since both shapes perform equally the same as stops.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the second annular shoulder have two walls perpendicular to the axis of the coupling and separated by a distance strictly less than the fourth axial height and a cylindrical wall with a diameter strictly greater than the diameter of the annular groove 38 of the driven shaft 18 since a square shoulder equally behaves as a stop similar to a triangular shoulder.

Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everett, 4,289,367.

Regarding claim 19, Everett, as discussed, teaches a maximum clearance corresponding to the difference of the axial height of the cavity and the sum of the first and second axial height of the axial end extensions (this depends where the cavity is taken). However, Everett fails to disclose the difference between the axial height of the annular groove A3 of the driven shaft 12 and the axial height of the second shoulder

Art Unit: 3679

13c corresponds to a maximum clearance strictly greater than the maximum clearance between the ends of the shafts. Applicant is reminded that a change in size is generally recognized as being within the level of ordinary skill in the art. Therefore, it would have been an obvious matter of design choice to change the size of the second shoulder or decrease the size between the ends of the shaft, especially when the ends of the shaft move relative to each other and such modification would have involved a mere change in the size of the components. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claim 21, Everett, as discussed, discloses the wall of the projection of the axial end extension of the drive shaft comprises curvature at its mid-point greater than a curvature of the wall of the projection of the driving shaft. Applicant is reminded that changing the conical surface of the wall into a spherical surface, which inherently has curvature, is an obvious modification since either shape allows ease of insertion into a cavity. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the wall of the projection of the axial end extension of the driven shaft comprise curvature at its mid-point greater than a curvature of the wall of the projection of the driven shaft as an alternative design for allowing insertion into the cavity of the coupling.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everett, 4,289,367, in view of Brighthouse, GB-300,037.

Regarding claim 24, Everett, as discussed, fails to disclose the coupling comprising two shells forming half cylinders comprising the first shoulder and the second shoulder on their respective inner faces, the first shoulder and the second shoulder facing the annular grooves in the driving shaft and the driven shaft, and the shells fixedly held by a cylindrical sleeve slid onto one end of one of the shafts. Brighthouse teaches, in Figure 4, a coupling comprising two shells **1, 2** forming half cylinders **1, 2** comprising a first shoulder **6** and a second shoulder **6** on inner faces. The first shoulder **6** and the second shoulder **6** face annular grooves **7** in a driving shaft and a driven shaft (page 2, lines 10-15), and the shells are fixedly held by a cylindrical sleeve **3** slid onto one end of driving shaft or the driven shaft to embrace to pipes (page 1, line 45-49). Therefore, as taught by Brighthouse, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the coupling comprise two shells as half cylinders comprising the first shoulder and the second shoulder on the inner faces of the cylinders, place the two shells to have the first shoulder and the second shoulder facing the annular grooves in the driving shaft and the driven shaft and be fixedly Held by a cylindrical sleeve slid onto one end of the shafts to embrace the driving shaft and the driven shaft instead of punching the shoulder from the coupling to retain the shafts with one continuous coupling.

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everett, 4,289,367, in view of Brighthouse, GB-300,037, as applied to claim 24, and further in view of Lancelot, 6,099,196, and Smetters, 5,261,449.

Regarding claim 25, Everett, as modified by Brighthouse, would have disclosed an attachment means (the screw shown with hidden line at the center of Figure 4 in Brighthouse) for connecting the cylindrical sleeve to one of the shells to keep the shells and the cylindrical sleeve joined together. However, Everett, as modified, fails to disclose the cylindrical sleeve fixed at one end using a shoulder that provides a stop and the attachment means (the screw) securing each shell to the sleeve at another end. Lancelot teaches, in Figure 5, a sleeve **26'** fixed at one end using a shoulder A1 (see marked-up attachment) to house half cylinders inside a cylindrical sleeve and be retained therein. Therefore, as taught by Lancelot, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the teachings of Brighthouse so that the sleeve is fixed at one end using a shoulder to house the half cylinders in place thus preventing the half cylinders to come out of the cylindrical sleeve. Given the modification, the shoulder would have acted as a stop since the shoulder blocks removal of the cylindrical shells. Further, given that Brighthouse already secures the shell with attachment means (the screw), one skilled in the art would have placed the attachment means, i.e., the screw, at the other end or close enough as evidenced by Smetters in Figures 3-6. Note Smetters suggests, in Figure 6, using a shoulder **208** at one end of a cylindrical sleeve **204** and a screw at the other end **164** (col. 6, lines 7-8).

Regarding claim 26, given the modification, the attachment means, (the screw) would have been one or more fasteners selected from the group consisting of a pin passing through the sleeve, a retaining ring, a nut, and a needle screw (note that Lancelott teaches a nut and Brighthouse teaches a screw).

Allowable Subject Matter

Claim 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 25 and 26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 24, the prior art of record does not disclose or suggest an electrical and mechanical connection system comprising a coupling comprising two shells as half cylinders respectively comprising a first shoulder and a second shoulder on inner faces (lines 1-3). The closest prior art, Everett, 4,289,367, teaches a tube. There's no motivation, given applicant's own disclosure, to modify Everett.

Response to Arguments

Applicant's arguments filed December 12, 2008 have been fully considered but they are not persuasive.

Applicant argues that amended independent claim 14 recites "the axial end extension of the driving shaft and the axial end extension of the driven shaft remaining in mechanical and electrical contact due to an elastic conducting means" and that Boyle is silent about the limitation. In response, the disclosure of Boyle might be silent. However, the figures clearly show this amended limitation as the elastic conducting means is basically a coil spring which Boyle shows. It should also be kept in mind that the claim does not set forth "direct contact" and intermediate components are not excluded between the spring and one of the shafts. The spring in Boyle provides both direct and indirect contact between the shafts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/E. G./

Examiner, Art Unit 3679

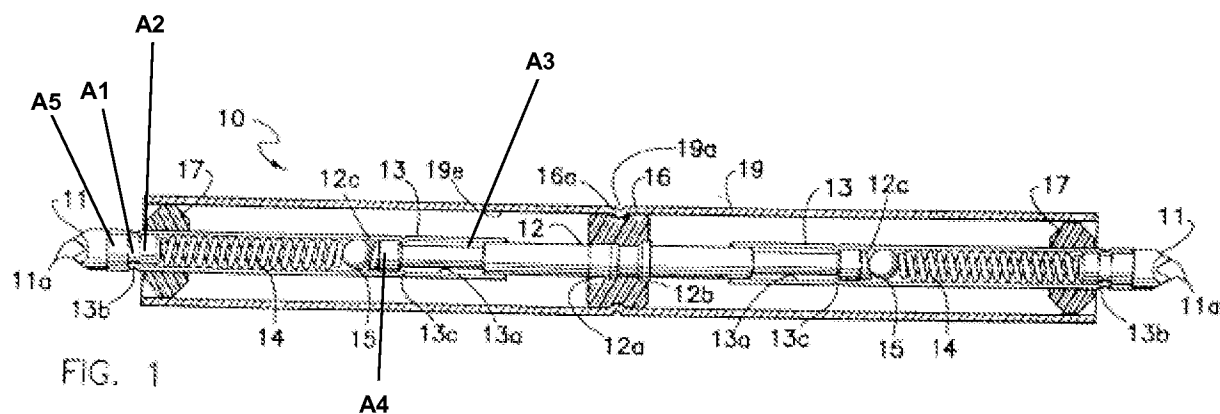
March 5, 2009

Attachments: one marked-up page of Boyle et al., US2002/0013085
one marked-up page of Everett, 4,289,367
one marked-up page of Lancelot, 6,099,196

/Daniel P. Stodola/
Supervisory Patent Examiner, Art Unit 3679

Art Unit: 3679

Boyle et al., US2002/0013085



Art Unit: 3679

Everett, 4,289,367

